

sand, and occasionally with pounded tile,* a fact which he thinks ought to tend to correct the haste with which some antiquaries pronounce fragments of mortar in which that ingredient appears, wherever they may occur in mediæval buildings, to be of Roman origin.

Plasterers and whitewashers (*dealbatores*) are mentioned in the "London Assize" of the year 1212: Westminster Hall was whitewashed for the coronation of Edward I.

And then as to masons:—

"Among the workmen employed in ancient times we find the masons, or *operarii*, separated into classes as early as the beginning of the thirteenth century: they were cutters and sculptors of free-stone; layers, or, as they were termed vernacularly, '*leggers*,' and setters; they worked either by the piece, or at fixed daily wages, with an extra allowance in some cases, as '*metesilver*,' but at the highest fixed rate of daily pay no '*metesilver*,' or corrody was given. Besides the plasterers and whitewashers, to whom we have already alluded, there were mud-stickers, who filled up the frame-work of timber houses with mud-clay; and besides the usual assistant labourers were excavators and barrowmen. In extensive buildings the various operatives worked in gangs under foremen: such gangs sometimes consisted of twenty men, whose foreman was called a *vintener* (*rintenarius*), an appellation which was given, in France, in after times, to the corporals of foot companies."

The iron used in architectural construction in early times is usually termed "Spanish iron:" the same material continued to be imported till a comparatively late period. Yet the extensive iron works of the forest of Dean, and the bloomeries of Furness, in Lancashire, were in full operation in the thirteenth century. There is also another sort of iron mentioned in accounts of the thirteenth century: it is called "Osmund;" the signification of the term is not very obvious, though we may presume it to be the name of the place of manufacture.

The architectural designs were probably made on vellum; the masons' moulds were cut in wood; the *liewis* (called in early accounts a *Lowes*), and the crane, were well known in the thirteenth century; and most of the appliances were then what they now are.

Lead was extensively used for roofs and gutters in the twelfth century. As to metal work, architecturally applied, Mr. Turner says:—

"From an early period, in fact from the tenth century, it may be remarked that in all drawings and paintings in manuscripts, iron work on doors presents an ornamental character: the bars of the hinges project almost entirely across the panel, and are more or less floriated. The scutcheons of locks are frequently ornamented. Padlocks, however, appear, according to Necham, to have been an ordinary apparatus for securing doors: he says, 'let the door have a penail lock.' Nail-heads are rarely represented, in early drawings, on the surface of doors; and it may be that no attempt was made to render them ornamental until a later date: we find that in the nineteenth of Henry II., 25,000 great nails, with heads, were supplied for the king's house at Winchester, by the borough of Gloucester, which, from its vicinity to the iron forges of the forest of Dean, was the Birmingham of the middle ages. As in the case of lead, it may be observed, that much of the smith's work, as in bars, hinges, &c. was done upon the spot. In this and succeeding centuries the various classes of workmen having been assembled, their employer found the rough material, and it was worked by the side of the structure to which it was to be applied. This mode of proceed-

ing naturally resulted from the generally straitened means of the artificers of early times, the imperfect division of labour, and also from the trouble and cost of obtaining manufactured articles from the few great towns which then existed in this country."

The walls were frequently plastered and covered with tapestry. There is satisfactory evidence of the style in which houses were built in the twelfth century:—The citizens assembled, in the first year of the reign of Richard I., enacted certain regulations "for appeasing the contentions which sometimes arise among neighbours touching boundaries made or to be made between their lands, so that such disputes might be settled according to that which was then provided and ordained. And the said provision and ordinance was called an Assize." We learn from this remarkable document, that in ancient times, that is, in times anterior to the year 1189, the greater part of the city was built of wood, the houses being roofed with straw, reeds, and similar materials. The frequent fires which took place owing to this mode of building, and more particularly the great conflagration in the first year of the reign of Stephen, which spread from London-bridge to the church of St. Clement Danes, destroying in its progress the cathedral, compelled the citizens to adopt some measures to avert the recurrence of such a calamity. Therefore, says the Assize, "many citizens, to avoid such danger, built according to their means, on their ground, a stone house, covered and protected by thick tiles against the fury of fire, whereby it often happened that when a fire arose in the city and burnt many edifices, and had reached such a house, not being able to injure it, it there became extinguished, so that many neighbours' houses were wholly saved from fire by that house."

It is clear from this statement that up to the first of Stephen, houses in London were constructed much as they had been in the earlier Saxon times, almost wholly of wood; but from that period a change began to take place; the inhabitants were encouraged to build of stone, and, to that end, various privileges were conceded to those who adopted the new fashion.

This assize forms an early Buildings' Act. In the buildings of the thirteenth century,—

"The flooring of rooms on the ground story was sometimes boarded, but there is little doubt it was in general nothing more than the natural soil well rammed down, over which litter was strewn. There is a writ of Henry III. ordering a room on the ground-floor in Windsor Castle to be 'boarded like a ship.' Upper rooms were in general floored with wood. It was not until the middle of the reign of Henry III. that paving-tiles seem to have been applied to domestic buildings; and even then they do not appear to have been of a decorated character: apartments in the royal manor-houses are directed to be paved with flat-tile (*plana tegula*). Towards the close of this reign ornamental tiles are first mentioned (*tegula picta*), but they were not extensively used. That large halls were not generally provided with wooden floors, except at the dais, is sufficiently clear from an expression which sometimes occurs, that 'the tables were fixed in the ground.' The space below the dais was sometimes called the 'marsh' of the hall; and it was, doubtless, often damp and dirty enough to deserve the name. An idea of its condition, even in a

royal residence, may be gathered from an order to widen the doorway of the hall at Winchester to admit the entrance of caris. On all points, however, relating to the internal finish of ordinary domestic habitations, it must be confessed we are quite in the dark; the only positive information now accessible relating exclusively to the royal dwellings; but if, as is most certain, wainscoting and wooden floors were commonly used in them, it is an obvious inference that such conveniences must have been within the reach of the wealthier classes of the community."

In design, the domestic buildings of this period are very admirable. Mr. Turner's book we can cordially recommend.

PRESENTATION OF THE ROYAL GOLD MEDAL OF THE INSTITUTE OF BRITISH ARCHITECTS TO PROFESSOR DONALDSON.

THE first of a series of conversazioni was held on Monday evening last, at the rooms of the Institute, in Grosvenor-street, when the Earl De Grey, president, attended, and presented the above-mentioned honorary distinction to Professor Donaldson. The gold medal of the Institute, it will be remembered, is placed annually at the disposal of the council, by the munificence of her Majesty; and it is to be awarded, subject to her Majesty's approval, to an architect, or writer on architecture, whether British or foreign, whose merits may seem to the council to entitle him to the honour. Last year the medal was awarded to Mr. Barry, R.A.

After a brief apology for intruding a matter of business on an evening more properly dedicated to social communication,

His lordship, the president, proceeded to address Mr. Donaldson. The present, he said, was the first opportunity he had had, since the award of the gold medal, of attending to present it in person to that gentleman. He had the greatest possible pleasure in doing so, a pleasure which he knew was shared by every man who heard him. From year to year the munificence of our Sovereign placed that tribute at the disposal of the Institute, to be awarded, not always to the same person, or for the same subject: it had before been given to foreigners, to gentlemen of this country, not members of the Institute, and last year he had the honour of giving it to one of their own brethren. The Council had always additional satisfaction when, with justice to others, with equity and impartiality, they could confer it on a member of that body; and he was happy that they had done so on the present occasion. It might be presumptuous in him to say anything of Mr. Donaldson's professional merits, but he had a right to speak of him as a member of the Institute of British Architects. For himself, he had come among them many years ago, wholly unformed, and unfit for the post he held, except in an anxious desire to do his duty. Mr. Donaldson was at that time Honorary Secretary to the Institute: from that gentleman his lordship had received the greatest assistance; and certainly the services which he had rendered to the then infant institution were most essential. It was then a novelty; and though many members of the profession were well disposed towards it, they had anxious doubts how far it might succeed, and at all events had no very ardent desire or anxious aspirations on the subject. Mr. Donaldson, however, had not only an ardent desire for its success, but a resolute determination that, so far as it depended on himself, it should succeed; and his expectations had been fully realized. It was true they were not now so splendidly located as they some day might hope to be; but he would ask any man to look at the faces which then surrounded him, and to say if their presence was not a proof that the Institute had succeeded; and he had no hesitation in saying, if there was one man in the kingdom to whom it was mainly indebted for that success, it was Mr. Donaldson. It was, therefore, a matter of congratulation to the members of that Institute to award to him a prize which would prove to

* There is the source for mortar, in the account of the repairs of Hereford in 1200: "In the piers of broken tiles, 2s. 4d. In four cases and four bags of lime, 7s. In twelve cart-loads of sand, 2s."

* Of course, more complicated works in iron, as locks, were not executed in the way described above. The "*Loewrichtes*" seem to have been a superior and independent craft from an early time; working, also, as in later days, as bell-foundries.